In the Claims:

Please amend claim 10 as follows:

1. (Withdrawn) A magnetic disk apparatus, comprising:

a magnetic disk that has a plurality of first servo sectors and a plurality of second servo sectors arranged alternately, wherein servo patterns containing position signals for controlling a position of a magnetic head on the magnetic disk are stored on the first servo sectors and the second servo sectors, wherein when a servo interruption period corresponding to adjacent first servo sectors is a first servo interruption period, a servo interruption period corresponding to adjacent first servo sector and second servo sector is a second servo interruption period, wherein the second servo interruption period is equal to or less than half of the first servo interruption period;

a retrieving unit that retrieves, during each of the second servo interruption periods, signal levels of the position signals at a plurality of sample points;

an arithmetic unit that calculates an arithmetic result, by substituting the signal levels at a predetermined number of adjoining sample points in a predefined evaluation expression, shifts to next sampling points, and adds a predetermined number to the sample points; and

a monitoring unit that monitors the servo interruption period and high-frequency oscillation components in the servo interruption period based on the arithmetic result, to thereby obtain a monitoring result.

2. (Withdrawn) The magnetic disk apparatus according to claim 1, wherein the predetermined number of adjoining sample points is two.

3. (Withdrawn) The magnetic disk apparatus according to claim 1, wherein the predetermined number of adjoining sample points is three.

4. (Withdrawn) The magnetic disk apparatus according to claim 1, wherein the predetermined number of adjoining sample points is five and a line joining the sample points has a saw-tooth pattern.

5. (Currently Amended) The magnetic disk apparatus according to claim 1, further comprising a position correction unit that corrects the position of the magnetic head based on the monitoring result.

6. (Withdrawn) A method to control high-frequency oscillation components, the method being applied to a magnetic disk apparatus comprising a magnetic disk that has a plurality of first servo sectors and a plurality of second servo sectors arranged alternately, wherein servo patterns containing position signals for controlling a position of a magnetic head on the magnetic disk are stored on the first servo sectors and the second servo sectors, wherein when a servo interruption period corresponding to adjacent first servo

sectors is a first servo interruption period, a servo interruption period corresponding to adjacent first servo sector and second servo sector is a second servo interruption period, wherein the second servo interruption period is equal to or less than half of the first servo interruption period, the method comprising:

retrieving signal levels of the position signals at a plurality of sample points during each of the second servo interruption periods;

calculating an arithmetic result by substituting the signal levels at a predetermined number of adjoining sample points in a predefined evaluation expression, shifting to next sampling points, and adding a predetermined number to the sample points; and

monitoring the servo interruption period and high-frequency oscillation components in the servo interruption period based on the arithmetic result, to thereby obtain a monitoring result.

7. (Withdrawn) The method according to claim 6, wherein the predetermined number of adjoining sample points is two.

8. (Withdrawn) The method according to claim 6, wherein the predetermined number of adjoining sample points is three.

9. (Withdrawn) The method according to claim 6, wherein the predetermined number of adjoining sample points is five and a line joining the sample points has a saw-tooth pattern.

10. (Currently Amended) A magnetic disk apparatus including a magnetic disk having servo patterns on which position signals for controlling a position of a magnetic head on the magnetic disk are written, the magnetic head having a head sensitivity characteristic value, comprising:

a correction calculation unit that calculates a correction value to correct the position signals read from the servo patterns, using the head sensitivity characteristic value; and

a servo control unit that carries out a servo control of the magnetic head based on the correction value,

wherein the magnetic disk has a plurality of first servo sectors and a plurality of second servo sectors arranged alternately, wherein the servo patterns are stored on the first servo sectors and the second servo sectors, wherein when a servo interruption period corresponding to adjacent first servo sectors is a first servo interruption period, a servo interruption period corresponding to an adjacent first servo sector and a second servo sector is a second servo interruption period, and wherein the second servo interruption period is equal to or less than half of the first servo interruption period.

11. (Original) The magnetic disk apparatus according to claim 10, wherein the head sensitivity characteristic value is set so as to change proportionally.

12. (Original) The magnetic disk apparatus according to claim 10, wherein the head sensitivity characteristic value is set so as to change multi-value.

13. (Original) The magnetic disk apparatus according to claim 10, wherein the correction unit corrects the position signals using an amplitude ratio of predetermined signals included in the position signals, and the head sensitivity characteristic value.

14. (Original) The magnetic disk apparatus according to claim 10, wherein the correction unit corrects the position signals using a ratio of an open loop gain obtained by adding a predetermined amplitude disturbance to a zero-cross frequency, and an open loop gain obtained by adding a large amplitude disturbance to the head sensitivity characteristic value.

15. (Original) The magnetic disk apparatus according to claim 10, wherein the correction unit corrects the position signals, for each cylinder of the magnetic disk, using a different head sensitivity characteristic value set to each cylinder.